FAA ACHIEVEMENT PLAN:

FAA Corporate Projects, FY 2000-2002 and Beyond



INTRODUCTION

The <u>FAA Strategic Plan</u> sets forth the Federal Aviation Administration's (FAA's) mission and three mission-based goals for the aerospace system. Those goals are <u>Safety</u>, <u>Security</u>, and <u>System Efficiency</u>. The Strategic Plan also sets other goals that, while not directly mission-based, will enable FAA to achieve its mission. Those enabling goals address <u>People</u> (Model Work Environment), <u>Reform</u>, <u>Environment</u>, and <u>Global Leadership</u>.

The FAA Strategic Plan is intended to guide FAA activities for 5 to as much as 20 years into the future. This **FAA Achievement Plan** is the tactical plan. It describes a focused set of the major **actions** FAA is undertaking now – in the next 1 to 5 years – to move toward achieving the strategic goals.

FAA's senior managers have selected the projects presented here for corporate tracking and achievement. They are high priority projects for funding. FAA also includes them in the Administrator's annual Performance Agreement with the Secretary of Transportation. The Administrator has further identified 5 of these projects – Runway Safety, the Air Transportation Oversight System (ATOS), Deployment of Advanced Security Technology, National Airspace Redesign, and the Standard Terminal Automation Replacement System (STARS) -- as her top priorities for FY 2000.

FAA senior managers will review these projects approximately quarterly in a "colors" process. In that process, both lead and support organizations rate each overall project and their own roles as "green" (on target), "yellow" (uncertainties or issues need to be addressed), or "red" (major problems). Where projects are "yellow" or "red", senior managers discuss problems and corrective actions. This "colors" process and the monthly meetings the Administrator holds with the Deputy Secretary on the Performance Agreement are FAA's main devices for corporately tracking its achievements.

FAA will also discuss these projects and report on their accomplishment at the annual Challenger Session. Challenger Sessions are FAA's main device to obtain overall customer and stakeholder feedback on FAA-wide plans and accomplishments. For a full day, FAA's senior managers sit down with over 100 representatives of the full spectrum of the aerospace community and talk about what FAA has done and what it plans to do. The focus is on gaining comments from the aerospace community, organized by Strategic Plan goal.

The projects in this FAA Achievement Plan are key to improving how FAA serves its customers. They are not, however, everything important that FAA does. There are projects here, for example, that will improve how FAA controls aircraft or inspects airline facilities – but there is no project saying that FAA will continue to control aircraft or inspect facilities. Strategic planning is about change. It is not about the day-to-day activities that are the basis of what FAA

does. Yet FAA must continue to be excellent doing its day-to-day tasks to maintain the baseline from which improvement is built.

ORGANIZATION OF THIS PLAN

This Achievement Plan presents the corporate projects organized by Strategic Plan goal. Each section states the mission goal, the strategies (focus areas), and the strategic and associated performance goals. The plan then presents, under each strategy, the major projects. Information includes the project name and description; lead and major support organizations; proposed accomplishments for FY 2000 through FY 2002; and FY 2000 milestones.

The goal of this plan and process is for FAA to corporately identify, monitor, and do everything possible to ensure successful completion of a focused set of projects that will move FAA toward achieving its strategic goals.

Mission Goal: SAFETY

By 2007, reduce U.S. aviation fatal accident rates by 80 percent from 1996 levels.

Aerospace safety is the Federal Aviation Administration's primary goal—to use Secretary Slater's term, the "North Star" that guides the agency. FAA's broad strategies, described below, are to prevent accidents by addressing recurrent causes; share safety information, and improve certification and surveillance. The near term projects that will move FAA and the aerospace community toward those goals follow.

Safety Strategies (Focus Areas):

- Accident Prevention: Based on detailed analysis of the recurrent causes of accidents, prevent accidents before they happen through appropriate, targeted, systematic interventions in the aviation system.
- **Safety Information Sharing and Analysis:** Develop partnerships with the aviation community to share data and information supporting safe, secure aviation.
- **Certification and Surveillance:** Develop new approaches to working with others on certification, inspection, and surveillance and targeting FAA resources where they will do the most good.

Safety Performance Goals:

Strategic Plan Primary Corporate Performance Goal (Modified):

• **Fatal Aircraft Accident Rate**: By 2007, reduce the U.S. commercial aviation fatal accident rate per 100,000 hours flown by 80 percent from the three-year average for 1994-6.

Additional Strategic Plan Corporate Performance Measures:

- Overall Aircraft Accident Rate
- Fatalities and Losses by Type of Accident
- Occupant Risk: If a passenger or flight crewmember takes a flight at random from among those of interest (e.g., U.S. domestic flights in 1998), what is the probability of mortality? Calculated by multiplying the fraction of flights that end in fatal crashes by the fraction of passengers and flight crewmembers killed in those crashes.

FAA will also track the absolute number of accidents and fatalities to conform to DOT performance measurement. FAA will start by tracking rates for commercial aviation, including scheduled flights on aircraft of 10 seats or more, and expand to include nonscheduled and general aviation.

Key Short Range Performance Goals (FY 2000 FAA Performance Plan):

- **Fatal Aircraft Rate**. Reduce the fatal aviation accident rate for commercial air carriers from a 1994-1996 baseline of 0.037 fatal accidents per 100,000 flight hours. The 2000 target is 0.033 per 100,000 -- with the reduction to be achieved in 6 key areas outlined in the Safer Skies Agenda.
- General Aviation Fatal Aircraft Rate (Modified): Reduce general aviation fatal accidents by an amount that will result in a 20 percent improvement of the projected 2007 estimate of 437. The 2000 target results in a reduction of 3.0 percent (no more than 379 fatal accidents) with the reduction to be achieved in the key areas outlined in the Safer Skies agenda.
- Dangerous Goods: Decrease the rate of air shipment hazardous materials incidents by the year 2000 from a 1998 base.
- Airport Accidents/Incidents: By 2007, reduce (by X percent from baseline levels) the rate of airport accidents/incidents (i.e., accidents/incidents in which an aircraft leaves the pavement or in which Aircraft Rescue and Fire Fighting responds) that result in injury to persons or damage to aircraft. (Note: This is a new measure—data/baseline to be developed over the next year).
- Operational Errors and Deviations (Air Traffic): Reduce the rate of operational errors and deviations by 10% from 1994 baselines. The 2000 targets are 0.486 errors and 0.097 deviations per 100,000 activities.
- Commercial Space Transportation: Experience no fatalities and injuries to the public and significant damage to property caused by U.S. commercial space transportation.
- **Systems Acquisition and Integration (Human Factors):** Ensure human factors policies, process, and best practices are integrated in the research and acquisition of 100 percent of FAA aviation systems and applications.
- Runway Incursions: Reduce the number of runway incursions to a level 15% below a 1997 baseline of 292 incursions. The CY 2000 target is at or below 248 incursions.

Safety Corporate Projects

Strategy (Focus Area): ACCIDENT PREVENTION

Safer Skies: Runway Safety Program, Including AMASS. (Lead: ATS; Support AVR, ARP, ARA, ASY)

THIS IS AN ADMINISTRATOR TOP PRIORITY FOR FY 2000.

<u>Project Description</u>: The Runway Safety Program (formerly the Runway Incursion Program) initiates, promotes, and/or manages initiatives that prevent incidents and accidents attributable to runway incursions.

- Reduce the number of runway incursions by 15 percent below the CY-97 baseline of 292 to result in a CY-00 target that is at or below 248.
- AMASS Initial Operational Capability (IOC)

Accomplishments, FY 2000: <u>Runway Safety Program</u>: FY00 milestones were documented in the Program Implementation Plan published in April 1999. <u>AMASS</u>: First Initial Operational Capability (IOC).

Milestones, FY 2000:

- 1. There are 18 tasks (sub-tasks) identified in the Program Implementation Plan scheduled for completion during the first quarter of FY 2000. (12/99)
- 2. There are seven tasks (sub-tasks) identified in the Program Implementation Plan scheduled for completion during the second quarter of FY 2000. (3/00)
- 3. Final resolution of Human Factors issues Phase 1 & 2. (6/00)
- 4. There are eight tasks (sub-tasks) identified in the Program Implementation Plan scheduled for completion during the third quarter of FY 2000. (6/00)
- 5. AT & AF OT&E regression testing complete. (6/00)
- 6. AMASS First Initial Operational Capability (IOC). (8/00)
- 7. There are eight tasks (sub-tasks) identified in the Program Implementation Plan scheduled for completion during the fourth quarter of FY 2000. (9/00)

Accomplishments, FY 2001: <u>Runway Safety Program</u>: FY01 milestones were documented in the Program Implementation Plan in April 1999. <u>AMASS</u>: First ORD – completion of testing, delivery, and ready for commissioning of 40 add-on enhancements to the host ASDE-3 radar systems which will provide automated alerts and warnings of potential runway incursions and other hazards thus extending the capability of the ASDE-3 and enhances surface movement safety. (6/01)

Accomplishments, FY 2002: *Runway Safety Program:* FY02 milestones were documented in the Program Implementation Plan published in April 1999.

Safer Skies -- Commercial Aviation. (AVR; AGC, API, ARA, ASY, ATS)

<u>Project Description</u>: The FAA has adopted a focused priority safety agenda designed to bring about a five-fold reduction in fatal accidents based in part upon a comprehensive review of the causes of commercial aviation accidents. In partnership with industry, Safer Skies uses the latest technology to help analyze U.S. and global data to find the primary causes of accidents and determine the best actions to break the chain of events that lead to accidents.

The key components are:

- Controlled Flight into Terrain (CFIT);
- Uncontained Engine Failure;
- · Approach and Landing; and
- Loss of Control.

Commercial Aviation -- Controlled Flight Into Terrain (CFIT):

Milestones, FY 2000:

- Validate Minimum Safe Altitude Warning (MSAW) software parameters in the terminal automation systems. (12/99)
- Complete ATC CFIT Training through publication of an Air Traffic Bulletin. (3/00)
- Terrain Alert and Warning System (TAWS) Issue Final Rule. (3/00)
- Issue CFIT training aid for operators. (3/00)
- Implement selected interventions. (9/00)

Accomplishments, FY 2001:

- Implement selected interventions.
- Monitor performance-based data to track progress.

Accomplishments, FY 2002:

- Implement selected interventions.
- Monitor performance-based data to track progress.

Commercial Aviation -- Uncontained Engine Failure:

Milestones, FY 2000:

- Publish a Notice of Availability for Public Comment Advisory Circular (AC) that incorporates enhanced inspection methodology into the design approval process. (3/00)
- Implement a methodology to monitor performance-based data to track progress. (9/00)

Accomplishments, FY 2001:

- Publish Airworthiness Directive (AD) Notices of Proposed Rule Making (NPRM's) that propose enhanced inspections of HPT, LPT, and compressor priority parts.
- Issue AC material that incorporates enhanced inspection methodology into the design approval process.
- Monitor performance-based data to track progress.

Accomplishments, FY 2002:

- Publish Final Rule AD's that adopt enhanced inspections for HPT, LPT, and compressor priority parts for existing fleets.
- Monitor performance-based data to track progress.

Commercial Aviation -- Approach and Landing:

Milestones, FY 2000:

 Joint Safety Implementation Team (JSIT) determines feasibility of and prioritizes interventions. (9/00)

Accomplishments, FY 2001:

- Commercial Aviation Safety Team (CAST) adopts selected interventions with high payoff for aviation safety.
- JSIT develops detailed implementation plans for selected interventions.

Accomplishments, FY 2002:

- Implement selected interventions
- Monitor performance-based data to track progress.

Commercial Aviation – Loss of Control:

Milestones, FY 2000:

• Select and initiate analysis of accident and incident data set. (9/00)

Accomplishments, FY 2001:

- Develop Draft report recommending interventions and their effectiveness (Joint Safety Analysis Team, JSAT). (12/00)
- Joint government/industry approval of JSAT Report. Commercial Aviation Safety Team (CAST) (3/01)

Accomplishments, FY 2002:

- Joint Safety Implementation Team (JSIT) determines feasibility and prioritizes interventions. Develop metric to measure success.
- CAST adopts selected interventions with high payoff for aviation safety.
- JSIT develops detailed implementation plans for selected interventions.

Safer Skies -- General Aviation. (AVR; AGC, API, ARA, ASY, ATS, AVN)

<u>Project Description</u>: The FAA has adopted a focused priority safety agenda designed to bring about a significant reduction in fatal accidents, based in part upon a comprehensive review of the causes of general aviation accidents. In partnership with industry, Safer Skies uses the latest technology to help analyze U.S. data to find the primary causes of accidents and determine the best actions to break the chain of events that lead to accidents. The key components are:

- Controlled Flight into Terrain (CFIT);
- Weather;

- · Loss of Control;
- Survivability; and
- · Aeronautical Decisionmaking.

General Aviation - Controlled Flight into Terrain (CFIT):

Milestones, FY 2000:

- JSIT develops detailed implementation plans for selected interventions. (3/00)
- Initiation of selected interventions. (9/00)

Accomplishments, FY 2001:

- Implement selected interventions.
- Monitor performance-based data to track progress.

Accomplishments, FY 2002:

- Implement selected interventions.
- Monitor performance-based data to track progress.

General Aviation - Weather:

Milestones, FY 2000:

- JSIT develops detailed implementation plans for selected interventions. (3/00)
- Initiation of selected interventions. (9/00)

Accomplishments, FY 2001:

- Implement selected interventions.
- Monitor performance-based data to track progress.

Accomplishments, FY 2002:

- Implement selected interventions.
- Monitor performance-based data to track progress.

<u>General Aviation – Loss of Control, Survivability or Aeronautical Decisionmaking:</u>

Milestones, FY 2000:

- The Joint Steering Committee (JSC) will charter the Loss of Control, Survivability, Aeronautical Decisionmaking Joint Safety Analysis Team (JSAT). (6/00)
- Select and initiate the analysis of accident and incident data set. (9/00)

Accomplishments, FY 2001:

- Develop report recommending interventions and their effectiveness. Joint Safety Analysis Team (JSAT).
- Joint government/industry approval of interventions, metric. Joint Steering Committee (JSC)
- Joint Safety Implementation Team (JSIT) determines feasibility and prioritizes interventions.

Accomplishments, FY 2002:

- JSC adopts selected interventions with high payoff for aviation safety.
- JSIT develops detailed implementation plans for selected interventions.

Safe Flight 21. (ARA; ARC, ATS, AVR)

Project Description: Safe Flight 21 (SF-21) is a government/industry cooperative effort to develop and demonstrate a set of enhancements that facilitate free-flight capabilities. The main focus of SF-21 is the evaluation of the RTCA-recommended nine operational enhancements for free flight. These are: Improved Flight Information for Special Use Airspaces (SUAs), Weather Notice to Airmen (NOTAMS), and Pilot Reports (PIREPS); Controlled Flight Into Terrain (CFIT) Avoidance through Graphical Position Display; Improved Terminal Operations in low visibility conditions; Enhanced See and Avoid; Enhanced Operations En Route Air-to-Air; Improved Surface Navigation; Enhanced Airport Surveillance for the Controller; Enhanced Automatic Dependent Surveillance-Broadcast (ADS-B) Surveillance in Non-Radar Airspace; Establish ADS-B Separation Standards. SF-21 is intended to be a program that will "jump start" many of the promised Free Flight enhancements. Demonstration and validation of these enhancements are being planned in the Ohio Valley (in coordination with the Cargo Airlines Association (CAA) and in Alaska via the Capstone Initiative. In addition, the program will collect the data necessary to conduct a link evaluation.

Accomplishments, FY 2000: Safe Flight 21 Link Analysis will continue. The analytical work will have been completed and information exchange with EUROCONTROL will have occurred. (9/00)

Milestones, FY 2000:

- Safe Flight Link Analysis Status Report complete. (12/99)
- Alaska ground station delivered and installed. (3/00)
- MicroEARTS Capstone IOC at Anchorage. (6/00)
- Establish Ohio River Valley Infrastructure for Preparations of FY01 Flight Demonstrations. (9/00)

Accomplishments FY 2001: Complete procedure development for Safe Flight 21 applications. (9/01)

Final Accomplishment, FY 2002: Development and demonstration of a set of operational enhancements that facilitate free flight capabilities and use of ADS-B datalink. Additionally, Safe Flight 21 will have in use a GPS-based navigation and surveillance technology that will increase the pilot's situational awareness of traffic, terrain, and weather in the cockpit on a Cockpit Display of Traffic Information (CDTI).

GPS Implementation: Expand GPS Use. (AVR; ARA, ATS/AAF, ATS, ARA, API/AIA)

<u>Project Description</u>: The goal of this project is to promote the accuracy, availability, and reliability of the Global Positioning System (GPS) for domestic and worldwide flight as a component of the worldwide Global Navigation Satellite System. Key components are:

- Wide Area Augmentation System (WAAS)
- Develop Second Civil Aviation GPS Signal Frequency Spectrum Requirements

Wide Area Augmentation System (WAAS):

Accomplishments FY 2000: Achieve Contractor Acceptance Inspection (CAI).

Milestones, FY 2000:

- Test Evaluation and Acceptance (6/00)
- Contractor Acceptance Inspection (CAI). (6/00)
- Develop and flight-inspect 50 WAAS Instrument Procedures. (9/00)

Accomplishments, FY 2001:

Program definition to be decided at the 1999 Joint Resource Council (JRC)
 Meeting. FY 2001 accomplishments to be defined at that time.

Accomplishments, FY 2002:

 Program definition to be decided at the 1999 JRC Meeting. FY 2002 accomplishments to be defined at that time.

<u>Develop Second Civil Aviation GPS Signal – Frequency Spectrum</u> Requirements:

Accomplishments, FY 2000: The FAA will support the U.S. and International Civil Aviation Organization (ICAO) on positions of aeronautical spectrum at the International Telecommunication Union (ITU) World Radiocommunication Conference through participation at the May/June 2000 World Radiocommunication Conference (WRC-2000). FAA will continue to enhance the current Global Navigation Satellite System (GNSS) through the introduction of additional civil aviation GPS signals. Work to develop signal structure and spectrum requirements, and to secure international spectrum allocations will be continued.

- Advocate FAA position within the Interdepartment Radio Advisory Committee (IRAC) and the IRAC Radio Conference Subcommittee. (5/00)
- Develop and present FAA position and civil aviation views within U.S. preparatory effort for WRC-2000. (5/00)
- Support U.S. delegation to WRC 2000 through relevant papers and positions on issues of importance to the U.S./FAA (spectrum protection and allocation of L5). (6/00)

Accomplishments, FY 2001: Update L5 implementation plan to address issues requiring resolution at WRC-2002. Participation in ICAO GNSSP working groups and assorted WRC-02 preparatory meetings.

Accomplishments, FY 2002: Update L5 implementation plan to address issues requiring resolution at WRC-2002. Participation in ICAO GNSSP working groups, and assorted WRC-02 preparatory meetings, and participation in WRC-02.

Strategy (Focus Area): SAFETY INFORMATION SHARING

Global Aviation Information Network (GAIN). (ASY; ATS, AVR, ARP, AIO, API/AIA, AGC)

<u>Project Description</u>: The FAA proposed GAIN as a privately owned and operated international information infrastructure to collect, analyze, and disseminate aviation safety information. The GAIN Steering Committee has adopted the following description of GAIN: "GAIN promotes and facilitates the voluntary collection and sharing of safety information by and among users in the international aviation community to improve safety." At the Third GAIN World Conference in November 1998, a number of industry leaders spoke on the value of improving internal aviation safety reporting systems and sharing this information. FAA Administrator Jane Garvey commented at the Conference that "the corporate sponsorship of this conference [by United Airlines] reflects a significant shift toward a proactive, accident-prevention approach, both in industry and government." She concluded her remarks by stating that "GAIN is one of our best hopes for enhancing aviation safety in the next century."

GAIN accomplishments over the next several years will include:

- demonstrating new analytical and graphical techniques;
- revising ICAO's Annex 13 to support non-punitive safety information sharing and reporting;
- conducting analysis, expansion of GAIN beyond flight operations into air traffic system information sharing and maintenance programs;
- establishing an international GAIN Government Support Team; and
- convening at least two additional GAIN World Conferences.

- Work with the ICAO Accident Investigation Group (AIG) to actively promote voluntary, non-punitive safety-information sharing networks. Gain agreement on such a proposal by AIG meeting participants before December 31, 1999.
- Provide support to the GAIN Steering Committee in planning and conducting the fourth GAIN World Conference. Convene 4th GAIN World Conference by July 31, 2000.

 Complete feasibility demonstration project with Oak Ridge National Laboratory to study accident and incident precursors in the Air Traffic System. Deliver Summary Report by July 31, 2000.

Aviation Safety Action Program (ASAP). (AVR; AGC)

<u>Project Description</u>: ASAP is a joint FAA/industry program to generate safety information that may not be otherwise obtainable and use it to work as a team to correct safety-related issues before a potential disaster occurs.

Milestones, FY 2000:

- Revision of Advisory Circular 120-66 published by beginning of FY-2000 (2/00)
- Publish Air Transportation Handbook Bulletin for Air Transportation for Flight Standards use to implement ASAP (2/00)
- Information seminar for inspectors of interested carriers (6/00)
- Approve ASAP's submitted to headquarters for review by operators (9/00)

Accomplishments, FY 2002: Ongoing review of ASAP plans of operators willing to participate in the program.

National Aviation Safety Data Analysis Center (NASDAC). (ASY)

<u>Project Description</u>: The National Aviation Safety Data Analysis Center (NASDAC) provides a unique state-of-the-art safety analysis capability. The NASDAC system provides users with access to one of the most extensive collections of aviation data in the world, as well as a suite of advanced search tools that can perform integrated queries across multiple data bases and display pertinent elements in an array of useful formats. Additionally, NASDAC is bringing on-line advanced tools, such as data visualization and pattern recognition technologies.

Accomplishments, FY 2000:

- Data modeling, joint development with NASA of a model international data registry for ICAO.
- Initial implementation of aviation safety data encyclopedia system.
- Demonstration of relationships between selected data elements, precursors, and unsafe events (e.g., Incidents, accidents, pilot deviations).

- Data Modeling, joint development with NASA of a model international data registry; complete draft aircraft identifier and data registry requirements by April 30, 2000.
- Initial implementation of aviation safety data encyclopedia system (ASDES):
 Draft partial ASDES has been put on internet; alpha test by July 30, 2000.

Accomplishments, FY 2001:

- Expansion of data and information sharing agreements to other U. S. governmental agencies and university research community.
- Standardization of critical aviation safety data elements.
- Demonstration of tools for analyzing precursors to unsafe events.
- Prototype application of advanced analysis tools aviation safety data

Accomplishments, FY 2002:

- Expansion of data and information sharing agreements to international governmental agencies and some domestic aviation industry entities
- Provision of widespread availability and use of safety event precursor analysis tools
- Prototype web-based application for the delivery of new analysis tools

Strategy (Focus Area): CERTIFICATION AND SURVEILLANCE

NAS Modernization Safety Assessment. (ASY; ARA, AVR, ATS, AST)

<u>Project Description</u>: This project is a critical, early life-cycle component in the migration to a safer and more effective future National Airspace System (NAS). This ongoing task will be conducted in cooperation with FAA operational organizations. A system safety assessment is required to identify system requirements, potential safety hazards, and develop mitigation strategies for those hazards that have either an unacceptable consequence or an unacceptable probability of occurring. This assessment must be completed early in modernization to maximize safety and minimize cost. Assessments will be documented and all safety mitigation developed will be tracked throughout the system's life cycle.

Accomplishments, FY 2000:

- Develop a broad generic system safety program plan to be used in the safety assessment of emerging NAS systems. Safety assessment goals, objectives, methods, and time lines will be established. NAS modernization safety assessment priorities will be established and organizational responsibilities developed. (9/00)
- Modify the System Safety Handbook to reflect NAS modernization safety assessment requirements. (6/00)
- Train representatives from the lines of business (LOB's) who will be contributing to the safety assessment in safety risk management methods and analyses. (3/00)

- Develop training program on safety assessment methods. (6/00)
- Conduct first training session for engineers. (8/00)

Accomplishments, FY 2001:

- Complete and document analyses of at least three components of NAS modernization.
- Initiate a review of NAS system data collection and storage needs.

Accomplishments, FY 2002:

 Develop mission needs analysis to address NAS system data collection and storage requirements. A safety assessment of at least two components of NAS modernization will be completed and documented.

Dangerous Goods. (ACS; AVR, AGC)

<u>Project Description</u>: Less than 3 percent of the civil penalties for hazardous materials violations are issued to the air carriers that fly dangerous goods. Most civil penalties are issued to the parties who offer dangerous goods to air carriers for shipment, and are usually the result of undeclared dangerous goods shipments that leak or spill at an airport. FAA will continue inspecting more shippers of dangerous goods. Since there are an estimated 75,000 shippers who transport goods on U.S. air carriers, it will not be feasible to inspect them all. During each routine inspection of the air carrier's shipping records, FAA will select one or more shippers for inspection. FAA will also continue to inspect shippers identified through incident reporting. FAA will focus on serious dangerous goods incidents and on training requirements for air carriers.

Accomplishments, FY 2000: Refine the design of the dangerous goods module in the Air Carrier/Airport Information Reporting System (AAIRS) database. Establish a correlation between serious dangerous goods incidents and revenue ton miles or departures. Complete rulemaking on clarification of dangerous goods training requirements for air carriers. Continue inspections of over 1000 shippers of dangerous goods during each fiscal year.

Milestones, FY 2000:

- Refine the design of the DG shippers module in the Air Carrier/Airport Information Reporting System. (12/99)
- Inspect approximately 1000 shippers of dangerous goods. (9/00)
- Determine if backlog of DG enforcement cases exists and eliminate any backlog. (9/00)

Accomplishments, FY 2001: Increase inspections to over 1500 shippers of dangerous goods during each fiscal year, and focus inspection resources and outreach efforts on those dangerous goods most likely to cause serious incidents.

Accomplishments, FY 2002: Increase inspections to over 1800 shippers of dangerous goods during each fiscal year.

Space Transportation Vehicle Safety. (AST; AVR, ASY, AGC, ARP)

<u>Project Description</u>: This project will focus on delivering the necessary products and services required to enable new commercial space launch concepts safely. Specifically, these corporate products and services will address new commercial space launch concepts that involve crew and passenger transport, flight over landmasses, and reusable vehicles that employ aircraft-like systems and operations.

<u>Accomplishments, FY 2000</u>: Develop a STVS project plan that defines tasks and resources to accomplish project milestones. Establish a corporate process to evaluate launch vehicle proposals. Identify appropriate crew and passenger, medical guidelines for commercial space transportation.

Milestones, FY 2000:

- Complete initial draft of STVS program plan. (10/99)
- Complete STVS program plan. (12/99)
- Draft RLV evaluation process outline (10/99)
- Final RLV evaluation process. (3/00)
- Draft Crew/Passenger Medical Guidelines. (9/00)

<u>Accomplishments, FY 2001</u>: Based on lessons learned from aircraft certification, FAA will complete a preliminary identification of appropriate standards for space transportation vehicle manufacturing and performance.

<u>Accomplishments</u>, FY 2002: FAA will initiate research in support of regulations on medical qualifications for passengers and crew aboard commercial space transportation.

Air Transportation Oversight System (ATOS). (AVR; ASY, AGC) THIS IS AN ADMINISTRATOR TOP PRIORITY FOR FY 2000.

<u>Project Description</u>: ATOS is a systems approach to safety oversight of air transport operators. It includes establishing policies and ensuring compliance during and after certification. It incorporates a team approach to certification and establishing surveillance programs. It targets resources based on several factors, including operator experience, statistical analysis to identify trends, company growth, etc.

- Develop improved system safety-based surveillance job aids, provide Certificate Management Teams (CMT) assistance and direction in utilizing the aids, and integrate them into the ATOS Data Reporting Module. (4/00)
- Develop and provide an ATOS Standardization Seminar to all CMT members. This will be a comprehensive review of ATOS policies and procedures with special emphasis on managing the Comprehensive

Surveillance Plan (CSP) including retargeting of inspector resources, assigning and reassigning inspectors, and instructing inspectors on how to perform element performance and safety attribute inspections. (8/00)

 Complete FY 2000 activities specified in the ATOS Development and Implementation Management Plan. (9/00)

Accomplishments, FY 2001:

- Implement new training programs and adjust staffing per new standards for the new air carrier certification and surveillance process (10/00)
- Develop and implement Phase II of ATOS to include inspector training and automation enhancements (6/01)

Accomplishments, FY 2002:

 Complete an analysis to determine the feasibility of expanding ATOS beyond FAR part 121 air carriers (6/02)

Employee Drug- and Alcohol-Free Workplace. (this project will not start until FY 2001) (AVR, All with TDP's)

<u>Project Description</u>: The goal of this project is to strengthen the existing employee drug and alcohol program through management training and expansion of the random testing pool of safety- or security-sensitive positions.

Safety Risk Policy Implementation. (ASY; All)

<u>Project Description</u>: This program focuses on the need to maximize the use of safety risk management (SRM) in all major FAA decisionmaking. The program develops tools and policies and gives appropriate staff in the LOB's the skills to conduct sound and systematic safety risk management analyses, which the agency will use in making high consequence decisions. The FAA established Safety Risk Management Order 8040.4 as an important step to implement SRM throughout the agency. The proper use of SRM is vital to ensure that safety is considered from the beginning of projects, programs, and activities.

Accomplishments, FY 2000

- Convene semi-annual meetings of the Safety Risk Management Committee to help facilitate the implementation of Order 8040.4 (9/00 and ongoing)
- Revise and update current safety risk management tools in order to provide LOB's with enhanced resources for conducting safety risk management analysis. (6/00)
- Develop a model aviation safety risk management training course on the practical application of safety risk management. (3/00)
- Acquire SRM analytical models for use by LOB's. (6/00)

Accomplishments, FY 2001:

• Implement the continuous improvement SRM plan developed in FY 2000.

Accomplishments, FY 2002:

- Evaluate the need to amend the Safety Risk Management Order.
- Conduct detailed discussions with LOB's to assess safety risk management requirements.

Transition of Oversight Responsibilities at Air Force Launch Sites to FAA. (AST; AGC, ATS, ACS, API, AVR)

<u>Project Description</u>: The FAA is a principal participant in an initiative led by the White House Office of Science and Technology Policy (OSTP) and the National Security Council to assess roles and responsibilities for operations, maintenance, improvement, and modernization at U.S. space launch and reentry bases and ranges. The primary purpose is to develop a common vision among the commercial, civil, intelligence, and military sectors with respect to the future management of launch and reentry operations and sites. Also, the FAA is co-chairing an effort with the U.S. Air Force to develop national safety requirements and uniform administrative processes for the U.S. launch industry. The primary goal is to develop standards that will apply to all space launches from, and landing at, every U.S. site, Federal or non-Federal. These standards will be promulgated through FAA rulemaking.

Accomplishments, FY 2000:

- FAA will continue to work with OSTP, NSC, the interagency community, and the U.S. launch industry to examine the need for changes in the roles and responsibilities for management and operation of the U.S. space launch bases and ranges. Following completion of the White House-led review, FAA will continue to work with the U.S. space transportation industry and the Air Force to facilitate the inclusion of commercial requirements into the management of the launch sites.
- FAA will continue to take on a larger role in oversight of safety for U.S. commercial space launch activities at the Federal launch sites.

- In cooperation with OSTP and NSC, complete development of a strategy on the future use and management of the U.S. space launch bases and ranges and begin implementation of the strategy as applicable to commercial space transportation. (1/00)
- Complete a launch safety inspector training program. This program is being conducted in coordination with Air Force launch safety organizations. It provides classroom training and first-hand experience designed to prepare the FAA for increased launch safety oversight responsibilities at Air Force launch sites and for the oversight of increasing commercial launches from non-Federal launch sites. (3/00)
- Publish for public comment a NPRM containing launch safety requirements.
 This NPRM represents the first phase of a cooperative effort between the

FAA and the Air Force to develop national safety requirements for implementation at Federal and non-Federal launch sites. (9/00)

Accomplishments, FY 2001:

- FAA will begin to implement the plan through increasing safety oversight at U.S. Federal launch sites.
- FAA will publish a Final Rule containing national safety requirements for launches of expendable vehicles at U.S. launch sites or by U.S. citizens or firms.

Accomplishments, FY 2002:

- FAA will continue to implement increasing oversight of U.S. space launch and reentry bases and ranges.
- FAA will publish an NPRM containing national safety requirements for the processing of U.S. launch vehicles.

Mission Goal: *SECURITY*Prevent security incidents in the aviation system.

Security Strategies (Focus Areas):

- Security Baseline: Continue to improve the baseline security system for civil aviation then address vulnerabilities that may remain.
- FAA Information Systems Security Program: Develop and implement a comprehensive information security program to protect the National Airspace Systems.

Security Performance Goals:

Strategic Plan Corporate Performance Goals (Outcome Measures of Success):

- No Security Incidents. "Security incidents" means criminal or terrorist acts against commercial passenger air transportation that is subject to security regulation during which weapons, firearms, incendiary or explosive devices are used. These acts must result in hijackings, sabotage, bombings, aircraft piracy, or attacks within the secured areas of airports that could cause fatalities or serious injuries. This definition excludes: Hoax hijackings or bomb threats; unruly passengers; and, international disruptions in air traffic service.
- Explosive Device and Weapons Detection: Increase the ability of screeners to detect improvised explosive devices (through use of simulants) and weapons in checked and carry-on baggage and on the person with no significant increase in operational impact by 2003.
- Compliance with Security Requirements: Increase as measured by compliance audits.
- Risk and Vulnerability at Airports and Airway Facilities: Reduce by 2005 as measured by risk assessments.

Key Short Range Performance Goals (FY 2000 FAA Performance Plan):

- Aviation Security: Increase the detection of explosive devices and weapons that may be brought aboard aircraft.
 - 1) X percent improvement from a 1998 base by FY 2000 in detection of improvised explosive devices and weapons in carry-on baggage with no significant increase in operational impact.

- 2) X percent improvement from a 1998 base by FY 2000 in detection of improvised explosive devices and weapons carried on the person with no significant increase in operational impact.
- 3) Increase the percentage of selected passengers' checked bags screened with explosives detection systems from a 1998 base by FY 2000 while achieving X percent detection of improvised explosive devices.
- 4) Improve cargo security by an X increase from a 1997 base in the detection of improvised explosive devices in small packages accepted from unknown shippers by air carriers for air transportation.
- 5) Convene voluntary consortia at 170 airports, and provide tools and assistance to airports that maintain consortia.

Detection rates are sensitive information protected under CFR 14 Part 191. The baseline and targeted increases will be made available to appropriate parties upon request.

 Access Controls: Increase the aviation systems' ability to sustain compliance with security requirements by X percent by FY 2000 from a 1998 base year.

Detection rates are sensitive information protected under CFR. 14 Part 191. The baseline and targeted increases will be made available to appropriate parties upon request.

• **FAA Security:** By 2000, increase by 67 percent from a 1998 base year the number of FAA facilities accredited as fully meeting security standards.

Security Corporate Projects

Strategy (Focus Area): SECURITY BASELINE

Certification of Screening Companies. (ACS; AVR, AGC, API)

<u>Project Description</u>: Threat Image Projection (TIP) was validated as an effective means of measuring screener performance in January 1999. TIP data will be analyzed and used to develop performance standards for certificating screening companies. A Notice of Proposed Rulemaking (NPRM) and a final rule will be published and the certification of screening companies will commence. Processing and certifying screening companies is expected to require approximately 12 additional FAA personnel.

Accomplishments, FY 2000: Complete publication and analysis of the NPRM.

- Publish NPRM to certify screening companies. (1/00)
- Complete analysis of NPRM comments and begin initial draft of the final rule. (9/00)

Accomplishments, FY 2001: Publish final rule, prepare for certification of screening companies.

Accomplishments, FY 2002: Commence certification of screening companies.

Deploy Advanced Security Technology. (ACS; ARA) THIS IS AN ADMINISTRATOR TOP PRIORITY FOR FY 2000.

<u>Project Description</u>: Existing and emerging technology in the form of explosives detection systems (EDS) can significantly improve baggage screening and detection effectiveness. The purchase and deployment of additional EDS, explosives trace detection devices (ETD), and other equipment is funded by the Federal Government as part of U.S. counterterrorism policy and the national security strategy¹. This project implements a DOT Flagship National Security Initiative (White House Commission recommendations 3.1, 3.15, 3.16, and 3.20) and is a High-Impact Agency goal.

Accomplishments, FY 2000: Continue the purchase and deployment of explosives detection systems (EDS) (estimate 24), explosives trace detection devices (ETD) (estimate 114 devices) and other advanced security technologies (estimate 422 TIP ready, screener assist x-ray devices), and ensure their effective use.

Milestones, FY 2000:

- Install at least 24 additional EDS for checked bag screening and ensure their effective use. (9/00)
- Install 100 additional ETD for screening carryon bags and other articles, and ensure their effective use. (6/00)

Accomplishments, FY 2001: Continue the purchase and deployment of explosives detection systems (estimate 24), explosives trace detection devices (estimate 166 devices) and other advanced security technologies (estimate 139 TIP ready, screener assist x-ray devices) and ensure their effective use.

Accomplishments, FY 2002: Continue purchase and deployment of explosives detection systems (estimate 62), explosives trace detection devices (estimate 219) and other advanced security technologies (estimate 139 TIP ready, screener assist x-ray devices) and ensure their effective use.

Implement Automated Passenger Screening. (ACS; AVR, AGC, API)

<u>Project Description</u>: FAA will implement automated passenger screening with bag match or explosives detection system screening of selected passengers' bags, using the Computer-Assisted Passenger Prescreening System (CAPPS),

¹ The White House, "A National Security Strategy for a New Century", May 1997, p.10; reaffirmed in a publication with the same title dated October 1998.

working with OST, the Department of Justice, and others to ensure full civil liberties safeguards. The key near-term (1-2 year) milestone is to complete analysis of the NPRM on Security of Checked Baggage on Flights within the United States and then begin coordination for the final rule.

Accomplishments, FY 2000: Systemwide voluntary deployment within the United States of an effective automated passenger profiling system without compromising individual civil liberties.

Milestones, FY 2000:

- Complete analysis of comments on the NPRM on Security of Checked Baggage on Flights within the United States. (1/00)
- Final rule out of FAA. (8/00)

Accomplishments, FY 2001: Publish the final rule requiring the use of CAPPS with bag match and EDS screening of selectees, and begin implementation.

Accomplishments, FY 2002: Complete implementation of the final rule on "Security of Checked Baggage on Flights within the United States." Ensure effective implementation of the rule.

Facility Security Risk Management. (ATS; ACS, ARA)

<u>Project Description:</u> The physical safeguarding of FAA personnel and the critical infrastructure supporting the National Airspace System (NAS) has been the subject of several Presidential Commissions and GAO reports. Required protective measures are being identified through physical security and risk management assessments and supported by a funded implementation program. Assessments are conducted by ACS (in partnership with Air Traffic Services management) in accordance with the FAA Facility Security Management Program (Order 1600.69) and established FAA policies and procedures. Physical security assessments of Level 3 and 5 facilities, the most critical to the NAS, were completed in 1999, with risk management assessments scheduled for completion by December 31, 2000.

Accomplishments, FY 2000: Implement security upgrades at 8 FAA-staffed facilities.

- Perform engineering site surveys. (1/00)
- Initiate architectural and engineering design at 8 facilities. (3/00)
- Develop security database and conduct training. (6/00)
- Award contract for security system purchases, 2nd quarter 00: hardware deliveries to begin 3rd quarter 00. (6/00)
- Assess 200 level 1 and level 2 facilities, accomplish (25 level 1 and 25 level 2) assessments per quarter. (9/00)
- Security Risk Management (SRM) assessment of 8 level 4 and level 3 facilities complete, (1 level 4 and 1 level 3) assessments per quarter. (09/00)

Accomplishments, FY 2001: Assess the remaining 200 Level 2 and 150 Level 1 facilities and achieve physical security accreditation for 8 facilities.

Accomplishments, FY 2002: Assess the remaining 150 Level 1 facilities and achieve physical security accreditation for 15 facilities

Strategy (Focus Area): <u>INFORMATION SECURITY</u>

FAA Information Systems Security Program. (AIO; LOB's, ARC)

<u>Project Description</u>: FAA will continue implementation of its information system security program and security activities in the FAA Critical Infrastructure Protection Plan, resulting in increased protection of the national airspace administrative and mission support systems. This will be done through increased security awareness training, development and update of information systems security policies and procedures, enhanced incident reporting and tracking capability, increased security inspections and monitoring, assessment of system vulnerabilities, repair of those vulnerabilities as funding permits, risk mitigation, as well as intrusion detection.

Accomplishments: FY2000:

- Enhance incident reporting capability
- Initial Computer System Incident Response Capability (CSIRC)
- Continue Security awareness training
- Publish NAS Risk Assessment Report
- Publish FAA Order 1370.82
- Implement FAA Information Systems Security Training Plan
- Publish FAA Information Systems Security Architecture Version I
- Increase systems completing Vulnerability Assessments
- Increase systems obtaining security certification and authorization

Milestones, FY 2000

- Distribute approved FAA Order 1370.82, Information Systems Security Program. (3/00)
- Distribute FAA Information Security Concept of Operations. (6/00)
- Finalize long-term plan for deployment of Computer Security Incident Response Capability (CSIRC) in FY-00 and 01. (6/00)
- Deploy intrusion detection at permanent site and an additional 5 sites. (9/00)
- Certify and authorize 9 additional FAA systems. (9/00)
- Ensure that 100 percent of all FAA employees receive general security awareness training and 60 percent of systems administrators will receive specialized security training. (9/00)

Accomplishments: FY 2001: Enhance Computer System Incident Response Capability. Achieve a 20% increase of systems completing Vulnerability Assessments and a 10% increase of systems obtaining security certification and authorization. Implementation of Information Systems Security Program.

Mission Goal: SYSTEM EFFICIENCY

Provide an aerospace transportation system
That meets the needs of users
And is efficient in the application
Of FAA and aerospace resources.

System Efficiency Strategies (Focus Areas):

- **Free Flight:** Within safety and environmental considerations, work toward giving aircraft the opportunity to fly in a way that gives them the most benefit as they define it.
- **NAS Modernization:** Using the NAS Architecture as the guideline, continually refine and update the NAS to achieve efficient aerospace systems and operations.
- **Systems Integration:** Integrate airport and commercial space requirements into NAS planning and architecture.

System Efficiency Performance Goals:

Strategic Plan Corporate Performance Goals (Outcome Measures of Success): (Obsolete User Access measure not included; it was met.)

- **System Flexibility**: Reduce total number of published ATC preferential routes by 7 percent from the 1994 baseline by 2000.
- **System Delays**: Reduce the rates of volume- and equipment-related delays by 20 percent from the 1994 baseline by the year 2000.

Related Measures: FAA Fiscal Year 2000 Annual Performance Plan

- **Aviation Delays:** Reduce the rate of air travel delays by 5.5% from a 1992-1996 baseline of 181 delays per 100,000 activities. The FY 2000 target is 171 per 100,000 activities.
- System Capacity: Increase system capacity attributable to runways at the 25 busiest airports by 1 percent annually in the year 2000 from the baseline year 1998.

- Runway Pavement Condition: Maintain in good or fair condition at least 93
 percent of runways at all commercial service airports and reliever airports, as
 well as selected general aviation airports.
- Flight Route Flexibility: Increase the number of flight segments that aircraft are able to fly off ATC-preferred routes to 80% from a 1996 baseline of 75%. The 2000 goal is 80%
- GPS Landing Approaches: Increase access to the nation's airports during adverse weather conditions by publishing 500 GPS/WAAS approaches per year for the next 2 years, from a prior year (FY 1995 1998) baseline of 1,453 approaches. The FY 2000 target is to complete at least 2,453 approaches total.
- Airport Accessibility: Assist in the planning and development of a national system of airports, as identified in the National Plan of Integrated Airport Systems (NPIAS), that are geographically accessible for at least 98 percent of U.S. residents.
- Operation Availability of Key Services: Improve service delivery by maintaining operational availability of equipment at current levels while minimizing the impact.
- Develop and Deploy Integrated Systems: Put into operational service 100
 percent of the integrated systems necessary to deliver the capabilities
 required to modernize the NAS according to the JRC approved NAS
 architecture.
- *Aircraft Noise Exposure:* Reduce the number of people in the U.S. exposed to significant aircraft noise by at least 64 percent from the 1995 baseline of 1.7 million. The FY 2000 target is at or below 600,000.

System Efficiency Corporate Projects

Strategy (Focus Area): FREE FLIGHT

Free Flight Phase 1. (AOZ; ATS, ARA)

<u>Project Description:</u> The goal of Free Flight is to deliver, use operationally, and evaluate the performance (benefits to the users and operators) of a core set of operational capabilities by December 31, 2002. The five core capabilities of Free Flight Phase 1 that are identified as strategic components are:

- Surface Movement Advisor (SMA)
- Collaborative Decisionmaking (CDM)

- Conflict Probe User Request Evaluation Tool (URET)
- Passive Final Approach Spacing Tool (pFAST)
- Traffic Management Advisor (TMA)

Accomplishments, FY 2000: SMA will be deployed at 3 locations. Military Special Use Airspace (SUA) information will be added to the FAA/Industry Collaborative Decision-Making data exchange network (CDMnet). TMA will be deployed to Minneapolis ARTCC (Initial Daily Use). PFAST will be deployed at Dallas/Ft. Worth Airport (DFW) (Initial Daily Use). FAA will complete Build 1-URET CCLD detailed design development.

Milestones, FY 2000:

- Complete installation of SMA at 3 locations. (12/99)
- pFAST Deployed at Dallas/Fort Worth Airport (DFW) (IDU**) (4/00)
- Conduct Office of Air Traffic (AAT) training validation for TMA. (4/00)
- CDM -- Add military Special Use Airspace (SUA) information to the FAA/Industry Collaborative Decision Making data exchange network (CDMnet) (8/00)
- TMA -- Deployed to Minneapolis Air Route Traffic Control Center (ARTCC) (IDU**) (9/00)
- URET Complete Build 1-URET CCLD detailed design development (9/00)

Accomplishments, FY 2001:

- TMA -- Deployed by following dates to following ARTCC's: 11/00 ZLA (IDU**), 2/01 ZTL (IDU**), 5/01 ZMA (IDU**) & ZOA (IDU**)
- Conduct IOT&E Assessment for TMA. (1/01)
- pFAST Deployed by the following dates at the following airports: 2/01 LAX (IDU**), 3/01 ATL (IDU**) and 6/01 MSP (IDU**)

Accomplishments, FY 2002:

- pFAST -- Deployed by the following dates at the following airports: 10/01 STL (IDU**)
- URET -- Deployed by the following dates to the following ARTCC's: 11/01 ZME (IDU**), 12/01 ZID & ZKC (IDU**), 1/02 ZAU & ZOB (IDU**), 2/02 ZTL & ZDC (IDU**)
- ** IDU (Initial Daily Use) signifies the hardware and software are installed and the initial cadre of operators is using the system to provide services to NAS users.

Restriction Elimination and Flexible Flight Planning. (ATS)

<u>Project Description:</u> A major constraint to flexible flight is the wide array of procedural restrictions used in the system. They are often used to restrict aircraft movement during periods of severe weather. The North American National Route Program (NRP) is a traffic management initiative to offer

flexible, cost-effective routing options. It is an alternative to published Preferred Instrument Flight Rule routes for users. The Departure Procedures (DP)/Standard Terminal Arrival Route (STAR) program, the Preferred Route Reduction Program (P2R2), and Restriction Performance Management (RPM) are designed to allow for simplified movement of aircraft in the center and terminal environment. ATS published the Restrictions Reduction Plan in June 1997 and quarterly audits are being performed to determine progress.

Accomplishment, FY 2000: Seven percent reduction in ATC published Preferred Instrument Flight Rule routes.

Milestones, FY 2000: (9/00)

- Reduce for FY 2000, 7 percent of the published preferred *Instrument Flight Rule* routes from the 1997 baseline of 1,976.
- P2R2 Conduct semi-annual reviews and testing to identify possible routes for elimination.
 - Identify additional routes for testing and possible elimination. (12/99)
 - Complete previous quarter review and eliminate routes determined as unnecessary. (3/00)
 - Identify additional routes for testing and possible elimination. (6/00)
 - Complete previous quarter review and eliminate routes determined as unnecessary. (9/00)
- DP/STAR Conduct semi-annual reviews to identify airports for inclusion in and the development of new routes. Establish minimums as airports are identified for inclusion.
 - Identify terminal areas for inclusion in program phases. (12/99)
 - Complete previous quarter testing. (3/00)
 - Identify terminal areas for inclusion in program phases. (6/00)
 - Complete previous quarter testing, review program outcomes, and evaluate future program development. (9/00)
- RPM identify and develop areas where flexibility and enhancements can be made.
 - Review progress each quarter. (9/00)

National Airspace Redesign. (ATS; ARA, AOZ) THIS IS AN ADMINISTRATOR TOP PRIORITY FOR FY 2000.

<u>Project Description</u>: The FAA has never employed a national systems approach to the analysis and the design of the structure of the nation's airspace. The current national airspace redesign project includes development of a comprehensive vision for a 5 to 8 year effort that will include regional collaborative teams to review, analyze, and redesign the airspace. The effort

includes external users and community input. The redesign will utilize computer airspace modeling and environmental impact analysis. The architecture, design, and structure of the nation's airspace are being redesigned in a systematic, organized, and analytical manner. The 3-year goal is to formulate and begin implementing a redesign plan, first for the New York/New Jersey area, then for the Eastern United States, and finally, for the Western United States. By 2008, FAA will have reviewed all continental U.S. airspace and initiated redesign changes in areas where major efficiencies are expected to accrue.

Accomplishments, FY 2000: Review airspace and formulate/begin a redesign plan for New York/New Jersey and surrounding feeder areas. Initiate areaspecific analyses in support of Free Flight Phase 1 tools' implementation requirements.

Milestones, FY 2000:

- Model and simulate single center and high altitude concepts for the northeast United States (5/00) ATS
- Identify initial airspace issues for Southern (ASO), Great Lakes (AGL), and New England (ANE) Regions. (6/00)
 - Conduct RTCA SC 192 Workgroup 1 meeting in Orlando to solicit input from aviation interests in southeastern United States. (10/99)
 - Educate ASO/ANE/AGL Focus Leadership Teams on future procedures and technologies that impact airspace design concepts. (11/99)
 - Conduct Focus Leadership Teams meetings in October, January, and April to coordinate and collaborate on future airspace design concepts and begin to prioritize issues. (4/00)
- Identify initial airspace issues for New York and New Jersey Metropolitan Area (6/00) ATS
- Update National Airspace Management Plan to include RTCA SC-192 recommendations (7/00) ATS
- Establish Focus Leadership Teams in Alaskan, Central, Northwest, Southwest, and Western-Pacific Regions (7/00) ATS
- Continue research on concept for limited dynamic re-sectorization (9/00) ATS

Accomplishments, FY 2001: Review airspace and establish a redesign plan for national airspace in the geographic eastern portion of the continental United States. Continue area-specific analyses in support of Free Flight Phase 1 tools' implementation requirements.

Accomplishments, FY 2002: Review airspace and formulate a redesign plan for the geographic central portion of the United States. This will be done in concert with the redesign plan for the eastern portion of the United States. Conduct area-specific analyses in support of Free Flight Phase 1 tools' implementation.

Strategy (Focus Area): NAS MODERNIZATION

Improve NAS Communications. (ARA; ATS, AVR)

Project Description: Continued growth in air traffic services creates an everincreasing need for spectrum (or the more efficient use of existing spectrum) to support air/ground communications between the controllers and flightcrews. Previously, the increasing demand was handled by "channel-splitting" with the last split (to 25 kHz channels) occurring in 1977. The depletion of this resource is predicted to occur in the near future (less than 10 years), and a new digital system (NEXCOM) was designed to meet this need, along with the new requirement to provide air/ground data link. NEXCOM must replace the current air-to-ground radio infrastructure that consists of expensive-to-maintain VHF radios that are of the 1940's technology and have exceeded their life expectancy by 10 years. Controller-Pilot Data Link Communications (CPDLC) will provide a digital communications capability for en route air traffic control operations to supplement existing voice communications. CPDLC will initially use a communications service provider to provide necessary air/ground communications subnetwork capability to support data exchange between the air traffic controllers and CPDLC equipped aircraft. Eventually, NEXCOM will provide the necessary FAA infrastructure to provide the Air/Ground subnetwork to support CPDLC data communications.

Accomplishments, FY 2000: NEXCOM – Approved Integrated Program Plan for the NEXCOM Multi-Mode digital radio; and approved NEXCOM Multi-mode digital radio functional specification. CPDLC – Contract awards for CPDLC-1 Implementation, Integration, and maintenance; Build 1A Software Development.

Milestones, FY 2000:

NEXCOM:

- Approved Integrated Program Plan for NEXCOM Multi-Mode digital radio. (2/00)
- Approved Functional Specification for NEXCOM Multi-Mode digital radio. (4/00)

CPDLC:

- CPDLC Build 1 HOST software Critical Design Review (CDR). (12/99)
- Build 1 Data Link Applications Processor (DLAP) Integration contract award.
 (2/00)
- Build-1A Software development contract award. (2/00)
- CPDLC Build 1 DLAP Critical Design Review (CDR). (9/00)

Accomplishments, FY 2001: NEXCOM release of Multi-Mode digital radio Screening Information Request; (SIR) CPDLC Build 1A Implementation, Integration/Maintenance contract award.

Accomplishments, FY 2002: NEXCOM contract award, for Multi-Mode digital radio, CPDLC Build 1 key site Initial Operating Capability (IOC). IOT&E Assessment (8/02)

Standard Terminal Automation Replacement System (STARS). (ATS; ARA)

THIS IS AN ADMINISTRATOR TOP PRIORITY FOR FY 2000.

<u>Project Description:</u> The automation and display system currently used in the terminal area environment is antiquated and experiencing an increasing level of difficulty in maintaining operational status. There is a shortage of display equipment that precludes expansion capabilities. Additionally, logistical support is increasingly difficult. The new STARS will replace ARTS in many terminal control areas and new displays will replace equipment used in TRACON's and towers.

Accomplishments, FY 2000: The Early Display Configuration will be tested and operational and the baseline full service level (for DOD) tested and operational. The FAA full service system (with CHI enhancements) software development will continue.

Milestones, FY 2000:

- AT training at key sites complete. (11/99)
- Initial Operational Capability (IOC) of EDC at first key site. (12/99)
- IOC of EDC at second key site. (1/00)
- Independent Operational Testing and Evaluation (IOT&E) Early Assessment. (1/00)
- Department of Defense (DOD) Full Service Level (FSL) Initial System Capability (ISC) at initial site(s). (7/00)

Accomplishments, FY 2001: FAA FSL software development and DOD FSL deployment continue. IOT&E Assessment for EDC. In Service Decision (ISD) for EDC. (2/01)

Accomplishments, FY 2002: FAA/DOD FSL software development is completed and deployment continues.

Display System Replacement (DSR). (ATS; ARA)

<u>Project Description:</u> Aging display and computing infrastructure has created several high-visibility airline delays. FAA will field infrastructure replacement systems to reduce equipment-related airline delays. The Display System Replacement initial deployment began in FY 1998 and will finish this year.

Accomplishment, FY 2000: Government acceptance of DSR at final 2 sites, and Operational Readiness Demonstration (ORD) at 12 sites.

Milestones, FY 2000:

- Government acceptance of DSR at final 2 sites. (11/99)
- Operational Readiness Demonstration (ORD) at 3 sites. (12/99)
- ORD at 4 sites. (3/00)
- ORD at 5 sites. (5/00)

Note: Quantity of sites per reporting period may change if the FAA and the major airlines discover that a change in the schedule will mitigate the transition impacts caused by DSR.

Operational and Supportability Implementation System (OASIS). (ATS; ARA)

<u>Project Description:</u> OASIS provides commercial off-the-shelf based life-cycle replacement and enhancement of the current Flight Service Automation System including Graphic Weather Display System and Direct User Access Terminal Service. OASIS will provide communication emergency assistance, flight planning, and weather briefing capabilities between the flight service specialist and pilots. The implementation of OASIS will eliminate the supportability and capacity problems and operational deficiencies that exist with the current FSAS.

Accomplishment, FY 2000: The program schedule is being assessed by ARA/ATS in conjunction with the NAATS union, and a JRC approval of a revised baseline in the January-February 2000 time frame will be requested. The FY 2000 appropriation does not provide sufficient funds to complete development necessary to field OASIS in FY 2000.

Milestones, FY 2000:

- Initiate OT&E at Seattle AFSS. (1/00)
- IOC at Seattle AFSS. (6/00)
- First Operational Readiness Demonstration (ORD). (9/00)
- AT/AF training at SEA, STL, and MIA completed. (9/00)

Accomplishment, FY 2001: Continue fielding OASIS.

Accomplishment, FY 2002: Conclude fielding OASIS. Last ORD 9/02.

Improve Aviation Weather Information for the NAS. (ATS; ARA)

<u>Project Description</u>: FAA works closely with the National Weather Service and others to provide the best possible weather information to pilots and controllers. This project will improve the detection, forecasting, processing, and delivery of aviation weather information to pilots, airline operations centers, and controllers. For users/customers in the terminal area, improve forecasts, detection, and reporting of low level windshear (Low Level Windshear Alert

System [LLWAS] and Weather System Processor [WSP]), thunderstorms, icing, volcanic ash, ceiling and visibility, winds, and precipitation types using Integrated Terminal Weather System (ITWS) and a number of other complex systems and data link capability. For users/customers in the en route airspace (domestic and oceanic), improve forecasts, detection, and reporting of hazardous weather including turbulence, icing, thunderstorms, volcanic ash, ceilings and cloud tops, Weather and Radar Processor (WARP), and widespread low visibility. Flight Information Services Data Link (FISDL) is designed to deliver digital flight information (including current and forecasted weather) to the cockpit, which will improve safety, reduce costs to the FISDL users, and the FAA. This will increase the utility and efficiency of the NAS. The high quality, accurate, and consistent FISDL information is essential to improving situational awareness to support sound operational decisions by pilots, controllers, and dispatchers.

Accomplishments, FY 2000: Establish at least one operational FIS Data Link. The date for the WARP implementation depends on the scope and schedule impact of air traffic controller evaluations, which are being defined by ATS as part of WARP OT&E.

Milestones, FY 2000:

- ITWS Test Readiness Review (TRR) complete. (7/00)
- Independent Operational Testing and Evaluation (IOT&E) for WARP Stages 1 & 2. (8/00)
- LLWAS OT&E Complete. (9/00)*
- Establish at least one operational FIS Data Link. (9/00)
- WSP Functional Configuration Audit/Physical Configuration Audit (FCA/PCA) (9/00)
- In service decision, WARP Stages 1 and 2. (9/00)
- * Tentative date pending contract negotiations.

Accomplishments, FY 2001: Implementation of Collaborative Convective Forecast Product (CCFP), and In Service Decision (ISD) on ITWS.

Accomplishments, FY 2002: Last Operational Readiness Demonstrations (ORD) for LLWAS and WSP.

RESTORE: Revitalize Existing Structures, Technology, and Operational Resources. (ATS)

<u>Project Description</u>: The FAA National Airspace System Infrastructure includes buildings, grounds, systems, subsystems, equipment, ancillary equipment, telecommunications, and information. Building modernization or sustainment has been deferred for so many years that there are increasing risks of NAS equipment outages resulting from the aging building infrastructure and plant

equipment. Solid state equipment is jeopardized when it is not compatible with a building's plant equipment infrastructure. Many of the NAS buildings are beyond their economic service life of 30 to 40 years. The goal of this project is to restore the NAS infrastructure by sustaining, modernizing, and, in some cases, new construction of facilities. Facilities include airport traffic control towers (ATCT), air route traffic control centers (ARTCC), flight service stations (FSS), NAS support buildings, and power systems.

Projected accomplishments, FY 2000: If additive funding is received under the RESTORE Initiative it will increase the number of facilities that receive maintenance and rehabilitation, allowing improvements in the quality of FAA facilities. Thus, in FY 2000, FAA would be able to sustain some 72 additional airport traffic control towers (ATCT), modernize some 25 towers and Air Route Traffic Control Centers (ARTCC's) and construct 3 new towers. FAA would also sustain or modernize some 20 Automated Flight Service Stations (AFSS's), 120 NAS Support Buildings, and 71 power systems.

Milestones, FY 2000

Funded Building Projects:

- Airport Traffic Control Tower/Terminal Radar Approach Control Facility (ATCT/TRACON) Establishment/Sustainment/Replacement.
 - Replace 3; Improve 26
- Air Route Traffic Control Centers (ARTCC) Plant Modernization/Expansion
 - Improve 5
- Power Systems Sustained Support
 - Sustain 10
- Modernize and improve FAA Buildings and Equipment Sustained Support
 - Modernize 20; Improve Various

Accomplishments, FY 2001: Sustain 144 ATCT's, modernize 37 ATCT's and ARTCC's, construct 3 new towers, sustain or modernize multiple FSS's, 120 NAS Support Buildings, and 220 power systems (all unfunded).

Accomplishments, FY 2002: Sustain 144 ATCT's, modernize 43 ATCT's and ARTCC's, construct 3 new airport traffic control towers, sustain or modernize multiple FSS's, 120 NAS Support Buildings, and 140 power systems (all unfunded).

Host/Oceanic Modernization. (ATS; ARA)

<u>Project Description</u>: The Host and Oceanic Computer System Replacement (HOCSR) project will replace the en route Host and Oceanic systems and reengineer the software or make other software changes as needed to completely upgrade the automation backbone of the Enroute and Oceanic facilities. This project must be completed because of supportability issues, which threaten the

availability and reliability of legacy systems. The first phase of HOCSR replaced all the processors at En Route and Oceanic sites, and the Series 1 communication gateway at Oceanic sites. The second phase of HOCSR results in an upgraded software operating system that is necessary to complete planned peripheral replacements. In addition, the FAA plans oceanic modernization to support the mission needs for oceanic ATC operations at the Oakland and New York Air Route Traffic Control Centers (ARTCC) and the domestic/oceanic operations at the Anchorage ARTCC. Integrated oceanic modernization is referred to as Advanced Technologies and Operational Procedures (ATOP) and will include: flight data processing; surveillance data processing; controller-pilot data link communications; interfacility data communications; and the capability to add new user tools that prove beneficial to improving air traffic operations at each of the oceanic facilities.

Accomplishments, FY 2000: Phase 2 National Release of the operational software will be released to all HOST/Oceanic Modernization sites. Phase 2 software will be fully implemented at the 20 en route sites and 3 oceanic sites. Planning for replacement of the end-of-life (EOL) peripherals will continue. Peripheral replacements for FY00 will be scheduled based on projected EOL and the selected replacement strategy. Contract award for oceanic modernization, Advanced Technology and Operational Procedures (ATOP) will occur.

Milestones, FY 2000:

- ATOP Industry Day. (12/99)
- HOCSR Phase 2 National release. (12/99)
- ATOP JRC. (1/00)
- ATOP SIR Release. (1/00)
- HOCSR Phase 2 In Route In-Service Decision (ISD). (2/00)
- IOT&E Assessments on HOCSR Phase 2 Enroute. (3/00)
- Phase 2 full implementation (20 en route sites). (6/00)
- Phase 2 full implementation (2 ocean sites) (9/00)

Accomplishments, FY 2001: Complete partial deployment of new HOCSR peripherals for all Host sites. Planning for replacement of the end-of-life (EOL) peripherals will continue. Peripheral replacements for FY 2001 will be scheduled based on projected EOL and the selected replacement strategy.

Accomplishments, FY 2002: Complete HOCSR deployment of new peripherals for all Host sites. Complete removal and disposition of the old peripherals replaced. Peripheral replacements for FY 2002 will be scheduled based on projected EOL and the selected replacement strategy.

Strategy (Focus Area): SYSTEM INTEGRATION

NAS Airport Integration. (ARP; ATS, ARA)

<u>Project Description</u>: NAS/airport integration to ensure compatible development of airports and other components of the NAS, with particular emphasis on system capacity and instrument approach capability.

Accomplishments, FY 2000: Determine airports infrastructure needs, costs, and design standards suitability necessary to support GPS approaches. Complete capacity analysis for the top 25 airports.

Milestones, FY 2000:

- Establish workgroup to analyze airport infrastructure needs to support satellite navigation. (11/99)
- With input from the workgroup, identify geographical areas where adequate signal strength exists to support GPS-WAAS approaches. (12/99)
- Based on the coverage map and using a standardized assessment form, study a sample (perhaps 10 percent) of the General Aviation NPIAS airports to determine the airport infrastructure improvements and the associated cost to support WAAS approaches. This activity should focus on those facilities that currently only have a visual approach or a circling non-precision instrument approach. (6/00)
- Review data to determine if one or more infrastructure upgrade areas have excessive costs which could preclude the development of Instrument Approach Procedures (IAP) associated with a WAAS approach. If so, recommend research into measures to reduce those costs. (8/00)
- Validate input data for airport capacity analyses for the remaining 11 of the top 25 airports. (6/00)
- Complete computer airport capacity analyses for the remaining 11 of the top 25 airports. (9/00)

Accomplishments, FY 2001: Initiate a research program to determine whether infrastructure requirements to support GPS approaches at airports can be reduced.

Accomplishments, FY 2002: Based on the results of the research program, initiate changes in airport design standards, as appropriate, to make GPS approaches more affordable.

Space and Air Traffic Management System (SATMS). (AST: ATS, ARA, AGC)

<u>Project Description</u>: FAA will develop and implement integrated capabilities necessary to integrate new commercial space transportation operational concepts and requirements into the National Airspace System (NAS). The project will focus on efficient means to enable space vehicle flight through and in the NAS en route to and from space. Additionally, the project will address the emerging need to integrate new launch and reentry sites into the overall NAS. An objective of this project is to identify the impacts of the evolving space transportation industry on NAS modernization initiatives. Overall, the project is intended to help create a seamless, integrated space and air traffic management environment that achieves user satisfaction and overall system-efficiency goals.

Accomplishments, FY 2000: The project will identify National Airspace System (NAS) capabilities required to enable new commercial space launch technologies and sites.

Milestones, FY 2000:

- Update Commercial Space Transportation concept of operations in the NAS in 2005. (3/00)
- Enhance the process for conducting analyses of space launch and re-entry operations impacts on air traffic. (6/00)
- Identify and develop procedures for mitigation of risks associated with emergency de-orbiting space vehicles. (9/00)

Accomplishments, FY 2001: The project will identify and begin to implement policy changes affecting NAS operations (e.g., airspace access, priority, aircraft-spacecraft separation).

Accomplishments, FY 2002: The project will identify issues and initiate an indepth analysis of FAA's appropriate role in space traffic control.

FAA Enabling Goals

PEOPLE: The Foundation of Accomplishment REFORM: The Framework for Accomplishment

THE ENVIRONMENT: Our Responsibility

GLOBAL LEADERSHIP: Commitment to Worldwide

Improvements

There are four **enabling goals** in the Strategic Plan that are not directly a part of the core FAA mission, but that are critical to accomplishing the mission. FAA cannot help achieve a safe, secure, efficient aerospace system without a well-trained, well-managed, diverse work force working to its full capabilities. Reform of the FAA's personnel, acquisition, and financial systems is absolutely essential to making the kinds of improvements needed to satisfy the public. FAA and aerospace have clear environmental responsibilities that they must meet as they address safety, security, and system efficiency. Finally, aerospace is global and Americans fly and ship across the globe, so global leadership and a commitment to worldwide improvement are central to meeting FAA's mission. The following section highlights key projects FAA will achieve in these areas in FY 2000-2002 and beyond.

<u>PEOPLE</u>: Provide a model work environment supporting the productive, diverse, and highly skilled work force needed to carry out the FAA mission into the 21st century.

Opportunity for All. (ACR; All)

<u>Project Description</u>: The objective of this project is to provide a more efficient, cost-effective, and responsive manner of addressing Equal Employment Opportunity (EEO) complaints through alternative dispute resolution (ADR). This strategic project is a new start that proposes creation of a mediation program for EEO disputes. Previous agency EEO ADR efforts have been managed with resources on temporary detail from LOB's and staff offices.

Operating an EEO mediation program requires dedicated resources to implement the program, secure the services of mediators, educate parties about ADR, publicize the program to the work force, do case intake, match parties with mediators, work the logistics of dispute resolution sessions, monitor resolution agreements, monitor the effectiveness of the program, and prepare routine reports on the program for FAA management, DOT, and EEOC. To establish an effective internal cadre of mediators, appropriate training must be

selected, development of the mediators' skill acquisition progress must be monitored, and regular meetings must be conducted to maintain currency and consistency of mediator skills.

The study on civil rights service delivery conducted in 1999 identified opportunities to enhance the FAA's effort in the managing its diverse workforce. A work group is in the process of establishing corporate strategies for providing national civil rights services. Implementing these strategies will allow the agency to address issues of discrimination and underrepresentation proactively, which will result in the prevention of complaints.

Accomplishments, FY 2000: Implement mediation services to provide for an early resolution of complaints and address issues in the work place swiftly and effectively. Identify strategies to address issues of discrimination and underrepresentation proactively.

Milestones, FY 2000:

- Establish procedures to utilize commercial and other federal agency mediators to mediate FAA EEO cases. (12/99)
- Provide mediation services. (12/99)
- Establish baseline against which program effectiveness will be measured and metrics for measuring program effectiveness. (6/00)
- Conduct EEO mediation awareness briefings for 25% of management officials. (9/00)
- Initiate corporate strategies. (9/00)

Accomplishments, FY2001:

- Hire EEO ADR Program Managers (one per region/center/headquarters),
 SEP managers (three for headquarters) and Attorney (one for AGC-120).
- Train internal cadre of mediators.
- Provide mediation services.
- Conduct EEO mediation awareness briefings for remaining 75 % of management officials.
- Conduct EEO mediation awareness briefings for 50% of employees.
- Implement corporate strategies.

Accomplishments, FY2002:

- Provide mediation services.
- Conduct EEO mediation awareness briefings for remaining 50% employees.
- · Conduct evaluation of EEO ADR Program.
- Implement corporate strategies.

Accountability Board. (AHR; AGC, ACR, ACS, ARC)

<u>Project Description</u>: The Accountability Board (AB) is an important tool in helping the FAA achieve and maintain a model work environment for all

employees. Its role is to provide oversight to FAA managers to ensure that allegations of sexual harassment or sexual misconduct are dealt with timely, consistently, and fairly across the entire organization. During FY 2000–2002, the scope of the Board will be expanded to include other areas that reinforce FAA's commitment to a model work environment. The AB process does not interfere with or affect an employee's right to raise an issue through the EEO discrimination complaint process. Rather, the goal of the AB is to hold managers accountable for timely, thorough investigation of allegations and for taking corrective actions, as appropriate, which are consistent in all organizations and in all regions/centers. As a result of analyzing corporate trends, the AB also will identify systemic problems and recommend to the Administrator and Management Board appropriate interventions.

Accomplishments FY 2000: Expand the Accountability Board's scope and review beyond sexual harassment and misconduct of a sexual nature to include other areas of harassment or discriminatory behavior.

Milestones, FY 2000:

- Establish a Design Team to define the expanded scope and develop an expansion Plan of Action and milestones. (11/99)
- Develop Expansion Plan. (4/00)
- Implement an expanded Board. (7/00)

Accomplishments FY 2001: Ongoing evaluation and adjustments as necessary.

Accomplishments, FY 2002: Same as above

<u>REFORM</u>: Fundamentally change the way the FAA operates by implementing personnel and acquisition reform and pursuing financial reform.

Conclude implementing the Cost Accounting System (CAS). (ABA; ATS, ARA, AIO, ARC)

<u>Project Description</u>: In order to monitor and control costs more effectively, FAA needs better financial cost information. FAA has made significant progress in the development of a cost accounting system that will permit the allocation of cost to users and meet the mandate of recent legislation. The CAS will satisfy both internal and external cost accounting information requirements; provide detailed support to the calculation of user fees; determine the FAA costs to provide services to end-users; and facilitate the development and refinement of useful performance measures. The CAS will improve efficiency and

effectiveness by providing management with the tools necessary to improve organizational effectiveness and better manage costs.

Accomplishments, FY 2000: Implement Revised Enroute and Oceanic Air Traffic Services (ATS) and FSS's.

Milestones, FY 2000:

- Implement FSS's and Revised Enroute and Oceanic (ATS) . (04/00)
- Begin Terminal/Tower (ATS) . (5/00)

Accomplishments, FY 2001: Implement ATS Terminal/TRACON, Research and Acquisition (ARA), and Mike Monroney Aeronautical Center.

Accomplishments, FY 2002: Complete implementation of the baseline system. Implement Aviation Security, Regulation and Certification, Airports, Commercial Space Transportation, and all remaining FAA organizations. Begin maintenance and operation of the system.

Receive Unqualified Audit Opinion for FY 1999 and Subsequent Fiscal Years. (ABA; ARA, ATS, ARC)

<u>Project Description</u>: A key measure of the quality of FAA's financial management is the audit opinion. FAA's goal for the FY 1999 audit is to receive an unqualified audit opinion on FAA input to the DOT Consolidated Financial Statement and any individual statements for which FAA is responsible.

Accomplishments, FY 2000: Receive unqualified opinion from the DOT OIG or independent source. To do that, 1) Headquarters management, including Airway Facilities, the Chief Financial Officer, Regional Administrators, and Regional Airways Facilities organizations will close out and capitalize F&E projects within 6 months of commissioning and monitor completion of backlog in order to maintain current status prior to each year end. 2) Regional Administrators will maintain supporting document files in centralized locations within the Logistics organizations. 3) Overtime and contractor support should be provided to continue the close-out process in all regions.

- Establish Work-In-Process beginning/ending balance in DAFIS that is supported by documentation of costs incurred. (10/99)
- Implement Financial Statements Module (FSM) 2000 and Treasury system (FACTS II) that will generate and support agency statements. (10/99-12/00)
- Generate ongoing detailed subsidiary DAFIS support for the Work-In-Process account so that the account is easily traceable to source transactions and documents. (10/99)
- Produce Financial Statement of Net Cost with Cost Accounting System (CAS). (02/00)

- Implement ORACLE Assets module prior to full implementation of wide scale financial accounting system (DELPHI). (6/00-7/00)
- Update CAS with allocations and depreciation of assets as calculated above. (9/00)
- Modify agency procurement system to facilitate a streamlined capitalization process and significantly increase the accuracy of capitalized and expensed items. (9/00)

Accomplishments, FY 2001: Same as above (FY 2000). Implement DELPHI financial system, replacing DAFIS. (6/01)

Accomplishments, FY 2002: Same as FY 2000. Integrate CAS, DELPHI, and future Property System(s) as part of a wide scale financial system. Link CAS information to FAA performance measures in conjunction with the DOT Strategic Plan. Link CAS and FAA performance measures to the Financial Statement of Net Cost.

Cost and Performance Management. (ABA; ATS, ARA, API)

<u>Project Description</u>: The project's focus is to link newly available cost information with operational performance information. The idea is to demonstrate how the data can be used in decisionmaking and to actually use the newly available data to improve cost effectiveness. This project should be understood as one step in a multi-year effort to ingrain the use of financial and performance data in decision-making at all levels of the organization, with the goal of better resource allocation.

Accomplishments, FY 2000: Link enroute and oceanic cost accounting data with performance data, benchmark service delivery points, and begin analysis of differences.

Human Resources Redesign. AHR: ABA

<u>Project Description</u>: Redesign the key elements of the agency's Human Resource Management Program to take full advantage of the flexibilities available under Personnel Reform. The outcome of this project will be more effective and efficient use of the agency's human capital, as reflected in enhanced mission accomplishment and employee morale. Key elements include policy development, modernization of automated systems, centers of excellence, and performance management.

Accomplishments, FY 2000: (1) Pilot test, complete evaluation, and recommend a new Human Resource Information System (HRIS) for FAA. (2) Develop a corporate personnel performance management framework and obtain National Partnership Council buy-in for implementation.

Milestones, FY 2000:

- Demonstrate performance of HR automation capability that supports revised business processes. Conduct pilot demonstration, evaluate outcomes and propose recommendation to HRIS sponsor. (9/00)
- Complete conversion and updating of the remaining 5 % of the HR webbased policy manual. (9/00)
- Reduce position fill time, improve processing accuracy and customer satisfaction. Achieve a 3% reduction in fill time and a 3% improvement in accuracy and customer satisfaction as measured against end of first quarter FY 00 performance. (9/00)
- Develop and propose for NPC/Agency action an Agency performance management framework. (9/00)

Accomplishments, FY 2001: Apply technology, process improvement and assessment to drive system and policy improvements, business performance and customer satisfaction.

- Achieve Initial Operational Capability (IOC) of a modern Human Resource Information System (HRIS) for customers and users at one FAA site.
- Implement needs based second generation HR policy.
- Implement an assessment of current operational processes to identify areas for improvement; reengineer/redesign processes and export to the regions.
- Implement agency performance management framework. Develop and deliver programs and tools for educating the workforce.

Accomplishments, FY 2002: Apply technology, process improvement and assessment to drive system and policy improvements, business performance and increased customer satisfaction.

- Implement the IOC of the modern HRIS at the last projected sites.
- Define HR operational standards for quality and timeliness. Develop and implement tracking and measurement procedures and export to the regions.
- Conduct a formal evaluation of the FAA's performance management program(s).

Compensation Implementation. AHR: All LOB's/Staff Offices

<u>Project Description</u>: Implement performance-based compensation programs to enhance the capacity to recruit, develop, sustain, deploy, and retain the appropriate work force to meet the mission demands of the 21st century.

Accomplishment, FY 2000: Implement new compensation system FAA-wide.

- Implement primary provisions of Executive Compensation Plan (base pay, short-term and long-term incentives) for all executives. (9/00)
- Complete the 2nd phase of evaluation of the Core Plan pilot. (3/00)

- Implement the Core Plan for non-bargaining unit employees. (4/00)
- Implement a streamlined and simplified job evaluation process (Job Documentation) for non-bargaining unit employees. (4/00)
- Complete and implement negotiated agreements for new pay plans for bargaining unit employees by September 2000. (9/00)

Accomplishments, FY 2001:

- Implement remaining provisions of the Executive Compensation Plan (supplemental retirement benefit, leave plan, professional development) in October 2000.
- Implement new pay plans for bargaining unit employees by September 2001.
- Complete 3rd phase of evaluation of Core Plan implementation in September 2001.

Accomplishments, FY 2002:

- Complete evaluation of Executive Compensation Plan implementation in October 2001
- Identify and implement any modifications necessary to Core Plan by December 2001

Career Paths and Development for the 21st Century Work Force. (AHR)

<u>Project Description</u>: To ensure that the FAA obtains the most competent and effective work force and assist all employees in achieving their career goals in the 21st century, the FAA will initiate comprehensive planning for career-path success. This planning effort will take place in phases. The first phase will begin at the senior management level and will include identifying the types of executive leadership the FAA will need in the future; and ways to develop high potential employees inside the agency to assume these future leadership roles. After a program for work force planning for senior leadership is created, the FAA will expand its efforts to other major segments of the work force, where appropriate career paths, resource planning, and development programs will be initiated.

Accomplishments, FY 2000: Develop corporate executive workforce planning, including succession planning so that FAA can grow many of its own highest caliber leaders.

Milestones, FY 2000:

 Propose a corporate executive workforce planning program (success profiles, resource planning, succession planning, workforce and executive development, external recruitment, communication). (9/00)

Accomplishments, FY 2001: Implement workforce planning for another organizational level or major occupational grouping of the FAA workforce, including identification of career paths, ideal competencies, and development activities required to advance up the paths.

- Propose a workforce planning program for another organizational level or major occupational grouping. (6/01)
- Implement workforce planning for another organizational level/occupational grouping. (9/01)

Accomplishments, FY 2002: Implement workforce planning for a third organizational level or major occupational grouping of the FAA workforce, including identification of career paths, ideal competencies, and development activities required to advance up the paths.

- Propose a workforce planning program for a third organizational level or major occupational grouping of the workforce. (6/02)
- Implement a workforce planning program for a third organizational level or major occupational grouping. (9/02)

Labor-Management Partnership. (AHR; ACS, ARA, ARP, AST, ATS, AVR, ABA, ACR, AGC, APA, API, ARC, ASY)

<u>Project Description:</u> Labor-management partnership has 2 dimensions. **Human dimension:** Continue the labor-management partnership process that ensures the active participation and contribution of unions and employees in the formulation of personnel policies, practices, and condition of employment programs and systems affecting the agency at all levels. **New technology:** Implement a labor-management system that identifies and mitigates issues relevant to new program and systems integration into the NAS. Create inprocess reviews that ensure Union issues are reviewed and incorporated, if possible, in the final system acceptance. Ensure new programs/systems reflect partnership acceptance and cooperation.

- Complete at least one agreement through the IBB process. (9/00)
- Complete the on-going NPC initiatives on performance management and MWE. (9/00)
- Identify sponsors, processes, and timelines for a partnership evaluation and begin the evaluation. (9/00)
- Establish specific, measurable, and relevant performance metrics for partnership evaluations nationally, regionally, and locally. (9/00)
- Successfully implement STARS EDC with union support. (9/00)
- Prepare proposal to formalize union involvement in technology and begin collaborative effort to finalize the process. (9/00)
- Establish NPC role in new technology at the 4th quarter NPC meeting. (9/00)

Information Technology Strategy. (AIO, AOA-4; AII)

<u>Project Description</u>: On February 1, 1999, the FAA Administrator appointed a Chief Information Officer (CIO) to lead the agency in improving its information technology management and acquisition functions. A key mechanism to help focus improvement initiatives is the development and implementation of a comprehensive information technology (IT) strategy. Major areas of emphasis within the IT strategy are:

- 1. Improvements in engineering processes used to plan, acquire, and maintain IT-intensive systems.
- 2. Improvements in the management and sharing of information and data, both internally across LOB's and externally with the aviation industry.
- 3. Improvements in IT investment and acquisition decisions to leverage lifecycle IT expenditures better.
- 4. Improvements in IT strategy, e.g., configuration management, architecture standards, and information security by incorporating Y2K lessons learned, and inventory information by leveraging successful Y2K processes, and standards for post-implementation.
- 5. Complete Y2K certification of new systems and recertification of modified systems; finalize Y2K contingency training/testing; finalize Y2K industry and international status reporting.

The FAA IT strategy will provide the agency with an effective management tool for guiding process improvement efforts and for helping make major IT investment and acquisition decisions.

Accomplishments, FY 2000:

- Complete, publish and begin to implement FAA-wide IT Strategy
- Complete, publish, and begin to implement the strategy for systematically improving FAA data management to make reliable information available quickly
- Complete first round progress in Improving Engineering Processes based on the FAA-iCMM, the most comprehensive framework for enterprise process improvement available
- Complete, publish, and begin implementing IT investment and acquisition recommendations
- Continue agency-wide process improvement training
- Complete, publish, and begin to implement the strategy to upgrade the skills of agency IT staff
- Complete, publish, and begin to implement the strategy to systematically exploit technology opportunities agency-wide
- Accomplish seamless transition into the new millennium
- Complete first round of an Information Technology architecture

Milestones, FY 2000:

- Publish and distribute the approved FAA IT Strategy. (10/99)
- Complete, publish, and distribute the Strategy for Improving Data Management. (10/99)
- Complete process improvement targets for selected programs to achieve FAA-iCMM Level 2 maturity. (12/99)
- Complete Y2K certification of new systems and re-certification of modified systems; finalize Y2K contingency training/testing; finalize Y2K industry and international status reporting. (12/99)
- Complete October Risk Report, identifying remaining risks associated with Y2K program. (10/99)
- Deliver Y2K wrap-up report to OMB. (3/00)
- Issue AOA-4 lessons learned document. (3/00)
- Complete development of an agency metadata repository. (9/00)

Accomplishments, FY 2001:

- Complete second round of IT Architecture
- Implement first round improvements of systematically improving FAA data management
- Complete second round progress in improving Engineering Processes based on the FAA-iCMM
- Implement IT investment and acquisition recommendations
- Implement IT benchmarks for major FAA programs
- Continue Agency-wide process improvement training

Accomplishments, FY 2002 on: Continue IT improvements initiated in FY 2000 and 2001.

FAA-Wide Major Procurement Program Goals (MPPG). (ARA; All)

<u>Project Description</u>: Achieve the FAA-wide major procurement programs goals the Administrator negotiates with the Office of the Secretary of Transportation (OST). Goals are established on a fiscal year basis and include a 5-percent goal for women-owned small business participation in FAA direct and indirect procurements.

Accomplishments, FY 2000-2002; Milestones, FY 2000: Each year, the specific goals are negotiated and assigned by OST for the following areas. For FY 2000, completion date is 9/00.

- Awards to small business (SB)
- Awards to socially and economically disadvantaged business (SEDB)
- Awards to small disadvantaged business (SDB)
- Awards to women-owned business (WOB)
- Subcontract awards to SB
- Subcontract awards to SDB
- Subcontract awards to WOB

Milestones, FY 2000:

- Report of quarterly accomplishments of direct awards within 60 days of the end of each quarter (2, 5, 8, and 11/00)
- Report of bi-annual subcontract awards. (5/00 & 11/00)

Communication Strategies. (AOA-5; AHR, ARA, AIO, ARC)

<u>Project Description</u>: Employees are kept fully informed of agency decisions about policies, programs, and activities through sharply increased dissemination of clear, timely, accurate and straightforward information. Help agency managers become more knowledgeable and skilled in communicating corporate and lines of business information. Promote greater agency cohesiveness and focus and improved agency performance. Place greater emphasis on communications as an integral part of the agency's way of doing business. Generally reflect the basic recommendations of the recently conducted Internal Communications Audit and Action Plan and other sources.

Accomplishments, FY 2000:

- Formally baseline primary internal electronic and non-electronic capabilities. Develop metrics to assess progress in improving internal communications.
- Encourage an evaluation of key internal communications vehicles by each line of business to ensure that the there is a need for these vehicles and that the information contained therein is clear, accurate, and timely.
- Research and identify ways that will enable all agency personnel to receive corporate information, electronically and non-electronically, in a timely and convenient manner.
- Establish a protocol clearly defining the intended purpose and appropriate use of each communication vehicle to assist employees in understanding how to use cc: Mail, the Intranet and other communications technologies.
- Provide guidance for managers on procedures and methods of disseminating agency news and information to all employees.

- Complete metrics development to assess the progress toward improving internal communications. (AHR; AIO) (12/99)
- Research the information needed to establish a protocol to help agency personnel choose the best vehicles for their communications, and to provide guidance on methods and procedures to distribute agency news and information. (VOICE) (12/99)
- Publish the protocol and guidance. (VOICE) (3/00)
- Complete a plan to formally baseline internal communications capabilities: Electronic (ARA; AIO) and Non-electronic (VOICE) (1/00)
- Complete a plan to regularly and reliably connect, where possible, all employees electronically. (AIO; ARA) (3/00)
- Complete a plan to provide alternative means for employees without electronic connection to rapidly receive agency information. (VOICE) (3/00)

Accomplishments, FY 2001:

- Initiate a training program at CMD for managers in internal communications.
- Initiate efforts to make internal communications a critical element in all supervisors/managers performance standards, and draft guidelines for appraising the performance of managers/supervisors in carrying out their responsibilities in this area.
- Develop and distribute a manual that familiarizes employees with information technology and explain how this technology can help employees learn more about agency policies, programs, and activities.
- Construct and implement an anonymous preliminary survey of employees to assess perceptions of changes in internal communications. Such a survey may be administered separately or made part of a larger employee opinion survey.

Accomplishments, FY 2002:

- Incorporate internal communications as part of the performance standards for all managers/supervisors.
- Continue communications training at CMD.
- Complete survey of agency employees and managers on internal communications.
- Validate that all employees who can be are connected electronically, and also validate that all employees have access or regularly receive all agency communications.

<u>THE ENVIRONMENT</u>: Address what may represent the single greatest challenge to the continued growth and prosperity of civil aerospace as we enter the 21st century.

Global Emissions. (API/AEE)

Project Description: The White House-sponsored National Science and Technology Council noted in its 1995 Report, Goals for a National Partnership in Aeronautics Research and Technology, that "Environmental issues are likely to impose the fundamental limitation on air transportation growth in the 21st century." Thus, a key goal followed to "ensure the long-term environmental compatibility of the aviation system." The Kyoto Protocol to the U.N. Framework Convention on Climate Change has drawn attention to aviation's growing emissions of carbon dioxide (CO₂). In order to address these issues, the FAA should develop a strategy to address aviation's contribution to global climate change, utilizing a modeling capability to assess aviation emissions and emission reductions on a national and/or global scale. The strategy should include an objective to evaluate aircraft emissions and assess potential mitigation measures (e.g., best operating practices, new technology, and

CNS/ATM system enhancements) that impact fuel burn, aircraft emission indices, routing, activity level, and fleet mix.

Milestone, FY 2000:

 Lead the interagency development for ICAO response to the Kyoto Protocol and the Intergovernmental Panel on Climate Change Special Report on Aviation and the Global Atmosphere. (9/00)

Accomplishments, FY 2001: Develop prototype aviation emissions modeling capability.

Accomplishments, FY 2002: Complete development of aviation emissions modeling capability and begin initial analyses of aviation's contribution to the total fossil fuel emissions inventory.

Local Air Quality. (API/AEE)

<u>Project Description</u>: Increasingly stringent ozone and particulate matter standards under the U.S. Clean Air Act have resulted in local authorities and environmental interest groups demanding action from Federal agencies and the air carriers to mitigate emissions of nitrogen oxides (NO_x) (that contribute to ozone production) and other pollutants. This may cause a major impediment to aviation's future growth and development. Thus, FAA should develop a strategy to address aviation's contribution to local air quality, utilizing an updated, expanded, and validated emissions and dispersion modeling capability. The strategy should include an objective to evaluate aircraft, APU, and GSE emissions and potential mitigation measures (i.e., best operating practices, new technology, and CNS/ATM ground enhancements), such as reduced engine taxi, derated takeoff, use of fixed systems in place of APU's, and alternative fuel and advanced technology GSE.

Milestones, FY 2000:

- Begin analyses to address data and methodology needs identified for aviation emission and dispersion calculation. (1/00)
- Develop an airport emissions baseline. (6/00)
- Develop mitigation options for reducing airport and aircraft emissions. (6/00)
- Assess aviation's current and forecasted contribution to local air quality.
 (9/00)

Accomplishments, FY 2001: Further develop local air quality modeling capability, reach stakeholder consensus on potential mitigation measures, and begin analyses of aviation's contribution to the emissions of Clean Air Act defined criteria pollutants.

Accomplishments, FY 2002: Monitor implementation of mitigation measures and publish an assessment of aviation's contribution to local air quality, including mitigation options and estimates of potential emissions reductions.

Airplane Noise. (API/AEE; AVR, AGC, API/APO, OST-P)

<u>Project Description</u>: Lead the ongoing activity in ICAO's Committee on Aviation Environmental Protection (CAEP) to develop the next generation international noise certification standards for subsonic jet and large propeller transport airplanes that will succeed the current Stage 3 standards. This project relates to a DOT Flagship Initiative.

Milestones, FY 2000:

- Stringency recommendation developed by CAEP technical working group (10/99)
- Approval by CAEP Steering Group (9/00)

Accomplishments, FY 2001:

- Approval at CAEP by January 2001.
- ICAO Council approval following balloting among ICAO members.
- Regulatory project initiation within FAA.
- Phase-out (implementation) addressed at 33rd ICAO Assembly, September 2001.

Accomplishments, FY 2002: Publish NPRM to amend 14 CFR Part 36.

Accomplishments, FY 2003: Council adoption and ICAO publication of amended edition of Annex 16, Vol. 1. Publish final rule, CFR Part 36.

<u>GLOBAL LEADERSHIP</u>: Improve safety, security, and system efficiency globally.

International acceptance and implementation of Satellite Navigation. (API/AIA; AVR, ATS, ARA)

<u>Project Description</u>: The goal of the FAA is worldwide acceptance and implementation of the Global Positioning System (GPS) as a principle component of the Global Navigation Satellite System (GNSS), which also includes the Russian Global Navigation Satellite System (GLONASS) and any other compatible system consistent with U.S. interests. This project will focus on identifying technical and institutional implementation issues and developing a coherent strategy to address those issues.

Accomplishment, FY 2000: Gain worldwide acceptance of the need to protect the existing GNSS spectrum allocation (1559-1610 MHz) at the ITU World Radiocommunication Conference 2000.

Milestone, FY 2000:

 Support U.S. delegation to WRC 2000 through relevant papers and positions on issues of importance to the U.S./FAA (spectrum protection for GPS and associated augmentation, i.e., WAAS). (6/00)

Additional accomplishments for FY 2000, 2001, 2002: 1) Encourage transition to WGS-84 worldwide and provide specific assistance in Central America, South America and the Caribbean. 2) Develop a U.S. position and actions on the European proposal to create the Galileo regional satellite navigation system, the European Geostationary Navigation Overlay System (EGNOS) and the Japanese MTSAT-Based Satellite-Based Augmentation System (MSAS). 3) Participate in international meetings of ICAO and other organizations to promote the use of GNSS, which includes GPS and its augmentations.

ICAO Universal Safety Oversight Audit Program. (API/AIA; AVR, ARP)

<u>Project Description</u>: In November 1997, ICAO sponsored a worldwide conference of Directors General of Civil Aviation (DGCA) to develop recommendations for implementation of an improved ICAO Safety Oversight Program. These enhancements were considered by the 32nd ICAO General Assembly in September/October 1998. As a result, in January 1999, ICAO implemented a revised safety oversight program encompassing U.S. requirements identified at the DGCA meeting and the General Assembly. The name of this program is the Universal Safety Oversight Audit Program (USOAP).

Accomplishments, FY 2000: Make necessary refinements to the revised USOAP. Ensure that ICAO reports are available for use in making FAA determinations under the International Aviation Safety Assessment (IASA) program. Approximately 60 initial and follow-up audits.

Milestones FY 2000:

- Track implementation of ICAO Universal Safety Oversight Audit Program to ensure audits are carried out in accordance with guidance developed pursuant to Assembly resolution A32-11. (9/00 and Ongoing)
- Evaluate ICAO audit information for applicability to IASA process. (9/00 and Ongoing)

Accomplishments, FY 2001: Update the U.S. position on incorporating airports, air traffic services, security, and accident investigation in the program and advocate this position at ICAO. Ensure that ICAO reports are available for use in making FAA determinations under the International Aviation Safety Assessment program. Approximately 60 initial and follow-up audits (approximately 120 total).

Accomplishments, FY 2002: Update the U.S. position on incorporating airports, air traffic services, security and accident investigation in the program and advocate this position at ICAO. Ensure that ICAO reports are available for use in making FAA determinations under the International Aviation Safety Assessment program. Approximately 60 initial and follow-up audits (approximately 180 total).